



MATERIAL SAFETY DATA SHEET

PRODUCT: Fumagillin from *Aspergillus fumigatus*

Date of Preparation or Revision: March 1, 2004

Section 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY:

Catalog Number: F-1028

Product Name: Fumagillin from *Aspergillus fumigatus*

Supplier: A.G Scientific, Inc. 6450 Lusk Blvd. Ste. E102, San Diego, CA 92121, phone 858 452 9925, fax 858 452 9926.

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name: Fumagillin from *Aspergillus fumigatus*

CAS Registry Number: CAS [23110-15-8]

Molecular Weight: 458.6

Molecular Formula: C₂₆H₃₄O₇

EC Number: 245-433-8

Symbol: Xn

R-Phrases: R22

Synonyms: Fugilin, Amebacilin, Amebacillin, Fugilin, Fugillin, Fumadil B, Fumagillin, Fumidil, Fumidil B, H-3

Section 3. HAZARDOUS IDENTIFICATION:

Acute Effects: May be harmful by ingestion, inhalation or absorption through skin. Material may cause irritation to the eyes, skin, mucous membranes, and the upper respiratory tract. Exposure to material may cause the following: anesthetic action, difficulty breathing, headache, and dizziness. Ingestion of material may cause gastrointestinal irritation, vomiting, and diarrhea.



Section 3. HAZARDOUS IDENTIFICATION (Continued):

Harmful.

HMIS RATING

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 1

NFPA RATING

FLAMMABILITY: 0

REACTIVITY: 1

Section 4. FIRST AID MEASURES:

In cases of skin contact, wash immediately with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes and wash before wearing. Consult a physician. In cases of eye contact, flush immediately with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

In cases of inhalation, remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen and consult a physician. If breathing stops, give artificial respiration and consult a physician.

In cases of ingestion, wash mouth out with water and consult the local poison center and a physician.

Section 5: FIRE-FIGHTING MEASURE:

Flammability of the Product: May be combustible at high temperature.

Extinguishing Media: SMALL FIRE: Use DRY chemical Powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Hazardous thermal (de)composition product: These products are carbon oxides (CO CO₂).

Special fire-fighting procedures: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

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Protection of Fire-fighters: Be sure to use an approved/certified respirator or equivalent.

Section 6. ACCIDENTAL RELEASE MEASURES:

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7. HANDLING AND STORAGE:

Store in a tightly closed container in a -20°C freezer in the dark and with desiccant.

HANDLING

User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

SPECIAL REQUIREMENTS

Store under inert gas. Air sensitive.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling

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Section 9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance Physical State: Solid

Color: White to Off-white

Molecular Weight 458.6

pH: N/A

BP/BP Range: N/A

MP/MP Range: 197.0 - 198.0 °C

Flash Point: N/A

Explosive properties: N/A

Section 10: STABILITY AND REACTIVITY:

Stability: Stable under normal handling procedures.

Conditions to avoid: Sensitive to light and to regular atmosphere

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition products: These products are carbon oxide (CO CO₂).

Section 11: TOXICOLOGICAL INFORMATION:

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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TOXICITY DATA

Oral

Mouse

2000 mg/kg

LD50

Subcutaneous

Mouse

800 MG/KG

LD50

CHRONIC EXPOSURE - TERATOGEN

Species: Rat

Dose: 25 MG/KG

Route of Application: Unreported

Section 12. ECOLOGICAL INFORMATION:

No information available.

Section 13. DISPOSAL CONSIDERATIONS:

Country, federal, state, and local regulations are varied and change frequently. For this reason, we recommend that you contact your local Department of Health Services for information on the disposal of this product or arrange for disposal by a licensed disposal company.

Section 14: TRANSPORTATION INFORMATION:

UN Number: N/A

Proper Shipping Name: N/A

IATA Class: N/A

IATA Packing Group: N/A

DOT: Proper Shipping Name: None. Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA: Non-Hazardous for Air Transport: Non-hazardous for air transport.

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Section 15. REGULATORY INFORMATION:

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 22

Risk Statements: Harmful if swallowed.

S: 36

Safety Statements: Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: Harmful if swallowed.

Safety Statements: Wear suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

Section 16. OTHER INFORMATION:

This product is supplied with the intention that it is for laboratory research or manufacturing use only. It must not, under any circumstances, be used for human, drug, food, cosmetic, agricultural, domestic or any other use. This product must only be handled and used by suitably qualified personnel in an appropriately equipped laboratory. Avoid contact with material. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Material should only be handled by qualified, experienced professionals. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. **A.G. Scientific, Inc.** shall not be held liable for any damage resulting from the handling or from contact with the above product.